

## ENGLISH LANGUAGE ABSTRACT OF JP 63024523

Subaccount 13076-002001

1 / 1 WPAT - ©Thomson Derwent

**Accession Nbr :**

1987-356614 [51]

**Sec. Acc. Non-CPI :**

N1987-267259

**Title :**

Piezoelectric realy in sealed moisture proof enclosure - has bimorph actuating member cantilever with terminations brought out externally of enclosure

**Derwent Classes :**

V03

**Patent Assignee :**

(GENE ) GENERAL ELECTRIC CO

**Inventor(s) :**

HARNDEN JD; KORNRUMPF WP

**Nbr of Patents :**

3

**Nbr of Countries :**

12

**Patent Number :**

EP-249864 A 19871223 DW1987-51 Eng 15p \*

AP: 1987EP-0108359 19870610

DSR: BE CH DE ES FR GB IT LI NL SE

JP63024523 A 19880201 DW1988-10

AP: 1987JP-0134994 19870601

US4755706 A 19880705 DW1988-29 12p

AP: 1986US-0876149 19860619

**Priority Details :**

1986US-0876149 19860619

**Citations :**

GB-959714; US2835761; US3777093; US4093883; US4658154

A3...8942; No-SR.Pub

**IPC s :**

H01H-057/00 H01L-041/08

**Abstract :**

EP-249864 A

The relay comprises a bimorph member with two piezoceramic plate elements bonded together in sandwich fashion with at least one intervening electrode. Another electrode is affixed to the outer surface of one plate element and a further electrode is affixed to the outer surface of the other plate element. An enclosure includes two conjoined, opposed endwalls and planar, opposed top and bottom walls. The bimorph member is mounted adjacent one end in cantilever fashion by one endwall with the other free end terminating short of the other endwall and is disposed in uniformly spaced relation between the top and bottom walls. A movable contact is carried by the bimorph member adjacent the free end. A stationary contact is mounted in opposed, normally gapped relation with the movable contact.

ADVANTAGE - Enables hermitic sealing.

**US Equiv. Abstract :**

US4755706 A

The piezoceramic relay comprises a bimorph member including two piezoceramic plate elements bonded together in sandwich fashion with a common intervening first electrode. A second electrode is affixed to the outer surface of the first plate element, and a third electrode is

affixed to the outer surface of the second plate element. The plate elements of the bimorph member are selectively prepolarised in a parallel configuration so that when an electric field is selectively applied across either one of the plate elements in the same direction as its prepolarised polarity.

The plate element contracts in a direction parallel to the plane of the electrodes causing the bimorph member to bend in the direction of the selectively energised plate element. An enclosure includes conjoined, opposed endwalls.

ADVANTAGE - Relay enclosure is susceptible to being made moisture impervious. (12pp)

US4755706 A

The piezoceramic relay comprises a bimorph member including two piezoceramic plate elements bonded together in sandwich fashion with a common intervening first electrode. A second electrode is affixed to the outer surface of the first plate element, and a third electrode is affixed to the outer surface of the second plate element. The plate elements of the bimorph member are selectively prepolarised in a parallel configuration so that when an electric field is selectively applied across either one of the plate elements in the same direction as its prepolarised polarity.

The plate element contracts in a direction parallel to the plane of the electrodes causing the bimorph member to bend in the direction of the selectively energised plate element. An enclosure includes conjoined, opposed endwalls.

ADVANTAGE - Relay enclosure is susceptible to being made moisture impervious.

**Manual Codes :**

EPI: V03-D05A

**Update Basic :**

1987-51

**Update Equivalents :**

1988-10; 1988-29